State of Utah

Department of Environmental Quality

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DIVISION OF AIR QUALITY
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Site ID: 10303

Title V Operating Permit

PERMIT NUMBER: 2300015001
DATE OF PERMIT: January 5, 2000
Date of Last Revision: December 24, 2003

This Operating Permit is issued to, and applies to the following:

Name of Permittee:

Ash Grove Cement Company
PO Box 51
Nephi, UT 84648

Permitted Location:

Leamington Cement Plant
Hwy 132
Leamington, UT 84638

UTM coordinates: 4,379,850 meters Northing, 397,300 meters Easting
SIC code: 3241

ABSTRACT

Ash Grove Cement Company operates the Leamington cement manufacturing plant in Juab County, Utah. This plant has been in operation since 1981. At the Leamington cement plant, cement is produced when inorganic raw materials, primarily limestone (quarried on site), are correctly proportioned, ground and mixed, and then fed into a rotating kiln. The kiln alters the materials and recombines them into small stones called cement clinker. The clinker is cooled and ground with gypsum into a fine powdered cement. The final product is stored on site for later shipping. The major sources of air emissions are from the combustion of fuels for the kiln operation, from the kiln, and from the clinker cooling process. The Leamington cement plant is a major source for emissions of PM_{10}, NO_x, and CO, and is subject to NSPS Subparts A, F, Y, & OOO, and NESHAP Subparts A & LLL.

UTAH AIR QUALITY BOARD

By:

Richard W. Sprott, Executive Secretary

Prepared By:

Eileen Brennan

Operating Permit History

1/5/2000 - Permit issued	Action initiated by an initial operating permit application	
12/24/2003 -Permit modified	Action initiated by an administrative amendment (initiated by source)	To add the cross-belt analyzer approved in DAQE-AN0303009-03 and incorporate limit changes from DAQE-AN0303006-03. In addition, a number of small changes or corrections were made. These result from minor changes in previously listed equipment and to correct typographical errors.

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Issued under authority of Utah Code Ann. Section 19-2-104 and 19-2-109.1, and in accordance with Utah Administrative Code R307-415 Operating Permit Requirements.

All definitions, terms and abbreviations used in this permit conform to those used in Utah Administrative Code R307-101 and R307-415 (Rules), and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the Rules.

Where a permit condition in Section I, General Provisions, partially recites or summarizes an applicable rule, the full text of the applicable portion of the rule shall govern interpretations of the requirements of the rule. In the case of a conflict between the Rules and the permit terms and conditions of Section II, Special Provisions, the permit terms and conditions of Section II shall govern except as noted in Provision I.M, Permit Shield.

Section I: General Provisions

I.A. **Federal Enforcement.**

All terms and conditions in this permit, including those provisions designed to limit the potential to emit, are enforceable by the EPA and citizens under the Clean Air Act of 1990 (CAA) except those terms and conditions that are specifically designated as "State Requirements". (R307-415-6b)

I.B. **Permitted Activity(ies).**

Except as provided in R307-415-7b(1), the permittee may not operate except in compliance with this permit. (See also Provision I.E, Application Shield)

I.C. **Duty to Comply.**

I.C.1 The permittee must comply with all conditions of the operating permit. Any permit noncompliance constitutes a violation of the Air Conservation Act and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (R307-415-6a(6)(a))

I.C.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (R307-415-6a(6)(b))

I.C.3 The permittee shall furnish to the Executive Secretary, within a reasonable time, any information that the Executive Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Executive Secretary copies of records required to be kept by this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. (R307-415-6a(6)(e))

I.C.4 This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance shall not stay any permit condition, except as provided under R307-415-7f(1) for minor permit modifications. (R307-415-6a(6)(c))

I.D. **Permit Expiration and Renewal.**

I.D.1 **This permit is issued for a fixed term of five years and expires on January 5, 2005**. (R307-415-6a(2))

I.D.2 Application for renewal of this permit is due by July 5, 2004. An application may be submitted early for any reason. (R307-415-5a(1)(c))

I.D.3 An application for renewal submitted after the due date listed in I.D.2 above shall be accepted for processing, but shall not be considered a timely application and shall not relieve the permittee of any enforcement actions resulting from submitting a late application. (R307-415-5a(5))

I.D.4 Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted consistent with R307-415-7b (see also Provision I.E, Application Shield) and R307-415-5a(1)(c) (see also Provision I.D.2). (R307-415-7c(2))

I.E. **Application Shield.**

If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit will not be a violation of R307-415, until the Executive Secretary takes final action on the permit renewal application. In such case, the terms and conditions of this permit shall remain in force until permit renewal or denial. This protection shall cease to apply if, subsequent to the completeness determination required pursuant to R307-415-7a(3), and as required by R307-415-5a(2), the applicant fails to submit by the deadline specified in writing by the Executive Secretary any additional information identified as being needed to process the application. (R307-415-7b(2))

I.F. **Severability.**

In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force. (R307-415-6a(5))

I.G. **Permit Fee.**

I.G.1 The permittee shall pay an annual emission fee to the Executive Secretary consistent with R307-415-9. (R307-415-6a(7))

I.G.2 The emission fee shall be due on October 1 of each calendar year or 45 days after the source receives notice of the amount of the fee, whichever is later. (R307-415-9(4)(a))

I.H. **No Property Rights.**

This permit does not convey any property rights of any sort, or any exclusive privilege. (R307-415-6a(6)(d))

I.I. **Revision Exception.**

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (R307-415-6a(8))

I.J. **Inspection and Entry.**

I.J.1 Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Executive Secretary or an authorized representative to perform any of the following:

I.J.1.a Enter upon the permittee's premises where the source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit. (R307-415-6c(2)(a))

I.J.1.b Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit. (R307-415-6c(2)(b))

I.J.1.c Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit. (R307-415-6c(2)(c))

I.J.1.d Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements. (R307-415-6c(2)(d))

I.J.2 Any claims of confidentiality made on the information obtained during an inspection shall be made pursuant to Utah Code Ann. Section 19-1-306. (R307-415-6c(2)(e))

I.K. **Certification.**

Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification as to its truth, accuracy, and completeness, by a responsible official as defined in R307-415-3. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R307-415-5d)

I.L. **Compliance Certification.**

I.L.1 Permittee shall submit to the Executive Secretary an annual compliance certification, certifying compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall be submitted no later than **December 15, 2000** and that date each year following until this permit expires. The certification shall include all the following (permittee may cross-reference this permit or previous reports): (R307-415-6c(5))

I.L.1.a The identification of each term or condition of this permit that is the basis of the certification;

I.L.1.b The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;

I.L.1.c The status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the method or means designated in Provision I.L.1.b. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and

I.L.1.d Such other facts as the Executive Secretary may require to determine the compliance status.

I.L.2 The permittee shall also submit all compliance certifications to the EPA, Region VIII, at the following address or to such other address as may be required by the Executive Secretary: (R307-415-6c(5)(d))

Office of Enforcement, Compliance and Environmental Justice
(mail code 8ENF)
EPA, Region VIII
999 18th Street, Suite 300
Denver, CO 80202-2466

I.M. **Permit Shield.**

I.M.1 Compliance with the provisions of this permit shall be deemed compliance with any applicable requirements as of the date of this permit, provided that:

I.M.1.a Such applicable requirements are included and are specifically identified in this permit, or (R307-415-6f(1)(a))

I.M.1.b Those requirements not applicable to the source are specifically identified and listed in this permit. (R307-415-6f(1)(b))

I.M.2 Nothing in this permit shall alter or affect any of the following:

I.M.2.a The emergency provisions of Utah Code Ann. Section 19-1-202 and Section 19-2-112, and the provisions of the CAA Section 303. (R307-415-6f(3)(a))

I.M.2.b The liability of the owner or operator of the source for any violation of applicable requirements under Utah Code Ann. Section 19-2-107(2)(g) and Section 19-2-110 prior to or at the time of issuance of this permit. (R307-415-6f(3)(b)

I.M.2.c The applicable requirements of the Acid Rain Program, consistent with the CAA Section 408(a). (R307-415-6f(3)(c))

I.M.2.d The ability of the Executive Secretary to obtain information from the source under Utah Code Ann. Section 19-2-120, and the ability of the EPA to obtain information from the source under the CAA Section 114. (R307-415-6f(3)(d))

I.N. **Emergency Provision.**

I.N.1 An "emergency" is any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. (R307-415-6g(1))

I.N.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the affirmative defense is demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

I.N.2.a An emergency occurred and the permittee can identify the causes of the emergency. (R307-415-6g(3)(a))

I.N.2.b The permitted facility was at the time being properly operated. (R307-415-6g(3)(b))

I.N.2.c During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in this permit. (R307-415-6g(3)(c))

I.N.2.d The permittee submitted notice of the emergency to the Executive Secretary within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirement of Provision I.S.2.c below. (R307-415-6g(3)(d))

I.N.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. (R307-415-6g(4))

I.N.4 This emergency provision is in addition to any emergency or upset provision contained in any other section of this permit. (R307-415-6g(5))

I.O. **Operational Flexibility.**

Operational flexibility is governed by R307-415-7d(1).

I.P. **Off-permit Changes.**

Off-permit changes are governed by R307-415-7d(2).

I.Q. **Administrative Permit Amendments.**

Administrative permit amendments are governed by R307-415-7e.

I.R. **Permit Modifications.**

Permit modifications are governed by R307-415-7f.

I.S. **Records and Reporting.**

I.S.1 Records.

I.S.1.a The records of all required monitoring data and support information shall be retained by the permittee for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-charts or appropriate recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. (R307-415-6a(3)(b)(ii)

I.S.1.b For all monitoring requirements described in Section II, Special Provisions, the source shall record the following information, where applicable: (R307-415-6a(3)(b)(i))

I.S.1.b.1 The date, place as defined in this permit, and time of sampling or measurement.

I.S.1.b.2 The date analyses were performed.

I.S.1.b.3 The company or entity that performed the analyses.

I.S.1.b.4 The analytical techniques or methods used.

I.S.1.b.5 The results of such analyses.

I.S.1.b.6 The operating conditions as existing at the time of sampling or measurement.

I.S.1.c Additional record keeping requirements, if any, are described in Section II, Special Provisions.

I.S.2 Reports.

I.S.2.a Monitoring reports shall be submitted to the Executive Secretary every six months, or more frequently if specified in Section II. All instances of deviation from permit requirements shall be clearly identified in the reports. (R307-415-6a(3)(c)(i))

I.S.2.b All reports submitted pursuant to Provision I.S.2.a shall be certified by a responsible official in accordance with Provision I.K of this permit. (R307-415-6a(3)(c)(i)

I.S.2.c The Executive Secretary shall be notified promptly of any deviations from permit requirements including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventative measures taken. **Prompt, as used in this condition, shall be defined as written notification within 14 days**. Deviations from permit requirements due to unavoidable breakdowns shall be reported in accordance with the provisions of R307-107. (R307-415-6a(3)(c)(ii))

I.S.3 Notification Addresses.

I.S.3.a All reports, notifications, or other submissions required by this permit to be submitted to the Executive Secretary are to be sent to the following address or to such other address as may be required by the Executive Secretary:

Utah Division of Air Quality
P.O. Box 144820
Salt Lake City, UT 84114-4820
Phone: 801-536-4000

I.S.3.b All reports, notifications or other submissions required by this permit to be submitted to the EPA should be sent to one of the following addresses or to such other address as may be required by the Executive Secretary:

For annual compliance certifications

Environmental Protection Agency, Region VIII
Office of Enforcement, Compliance and
Environmental Justice (mail code 8ENF)
999 18th Street, Suite 300
Denver, CO 80202-2466

For reports, notifications, or other correspondence related to permit modifications, applications, etc.

Environmental Protection Agency, Region VIII
Office of Partnerships & Regulatory Assistance
Air & Radiation Program (mail code 8P-AR)
999 18th Street, Suite 300
Denver, CO 80202-2466
Phone: 303-312-6440

I.T. **Reopening for Cause.**

I.T.1 A permit shall be reopened and revised under any of the following circumstances:

I.T.1.a New applicable requirements become applicable to the permittee and there is a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the terms and conditions of this permit have been extended pursuant to R307-415-7c(3), application shield. (R307-415-7g(1)(a))

I.T.1.b The Executive Secretary or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. (R307-415-7g(1)(c))

I.T.1.c EPA or the Executive Secretary determines that this permit must be revised or revoked to assure compliance with applicable requirements. (R307-415-7g(1)(d))

I.T.1.d Additional applicable requirements are to become effective before the renewal date of this permit and are in conflict with existing permit conditions. (R307-415-7g(1)(e))

I.T.2 Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. (R307-415-7g(2))

I.U. **Inventory Requirements.**

I.U.1 An emission inventory shall be submitted in accordance with the procedures of R307-150, Emission Inventories. (R307-150)

I.U.2 A Hazardous Air Pollutant Inventory shall be submitted in accordance with the procedures of R307-155, Hazardous Air Pollutant Inventory. (R307-155)

Section II: SPECIAL PROVISIONS

II.A. **Emission Unit(s) Permitted to Discharge Air Contaminants.**

(R307-415-4(3)(a) and R307-415-4(4))

II.A.1 **Quarry Operations** (designated as Quarry)
Unit Description: Rock drilling operations, truck hauling, and storage piles. No unit-specific applicable requirements.

II.A.2 **Stationary Crusher** (designated as 211.CR1)
Unit Description: Stationary crusher with an approximate production rate of 1000 tons per hour, for reduction of quarried material to 3 inch minus sized material. The crusher is equipped with a baghouse.

II.A.3 **Raw Material Transfer** (designated as 211.GA1)
Unit Description: Crushed material is transported to raw material storage by belt B8. The raw material transfers at the end of conveyor B8 prior to loading into raw material reclaim area. The conveyor transfer point is equipped with a baghouse and water sprays.

II.A.4 **Raw Material Silos** (designated as 315.SX1 thru 4)
Unit Description: Raw materials such as limestone, silica, iron, and shale are stored in one of four silos. The four silos are equipped with one common baghouse. No unit-specific applicable requirements.

II.A.5 **Fifth Component Silo** (designated as 315.SX5)
Unit Description: Raw materials are stored in a silo. This silo is equipped with a baghouse. No unit-specific applicable requirements.

II.A.6 **Kiln Feed Blending Silos (2)** (designated as 411.SX1 and 2)
Unit Description: Raw material is blended in one of two blending silos prior to feeding the kiln. The blending silos are controlled by one common baghouse. No unit-specific applicable requirements.

II.A.7 **Blending Silo Elevators (2)** (designated as 412.BE1 and 2)
Unit Description: Blended kiln feed is transferred to the kiln by bucket elevators. The elevators are equipped with a baghouse. No unit-specific applicable requirements.

II.A.8 **Coal Grinding System** (designated as 41B.ML1)
Unit Description: Coal is ground in a coal mill. Gases drawn from the preheater for the kiln entrain the coal in the mill and are dedusted in a baghouse.

II.A.9 **Coal Silo** (designated as 41B.SX1)
Unit Description: Storage of coal for grinding to powder, which is subsequently fired in the kiln and calciner. The coal storage silo is equipped with a baghouse.

II.A.10 **Kiln & Pre-Calciner and Raw Mill** (designated as 317.BF1)
Unit Description: Kiln burning process and preheater tower off gases are directed through the bottom of the raw mill where finely ground raw material is picked up. Combustion gases and fine raw materials are then vented to a baghouse.

II.A.11 **Raw Mill Recirculation** (designated as 316.BF1 thru 5)
Unit Description: Larger particles are removed from the raw mill, recirculated, and re-introduced into the raw mill feed. This system includes vibrating feeders, a conveyor system, and surge bin. Emissions are controlled by five equivalent baghouses.

II.A.12 **Cross-Belt Analyzer** (designated as 316.BF6)
Unit Description: Used for quality control. Emissions are control by a baghouse. No unit-specific applicable requirements.

II.A.13 **Kiln Feed Alleviator** (designated as 413.BF1)

Unit Description: Pneumatically conveyed kiln feed is separated from transport air in an alleviator followed by a baghouse. This process prevents the transport air from being introduced into the preheater. No unit-specific applicable requirements.

II.A.14 **Clinker Cooler** (designated as 417.CC1)

Unit Description: Grate type cooler used for cooling clinker from the kiln prior to transfer to clinker storage. The clinker cooler vent air is controlled by a baghouse.

II.A.15 **Clinker Belt Transfer** (designated as 419.BF8)

Unit Description: Clinker is removed from the clinker cooler by drag chains and dropped onto one of the clinker conveyor belts. The transfer points are controlled by a baghouse. No unit-specific applicable requirements.

II.A.16 **East Clinker Belt** (designated as 419.BC3)

Unit Description: Clinker from the clinker cooler is transferred into the East clinker silo by conveyor belt. The discharge from the belt is controlled by a baghouse. No unit-specific applicable requirements.

II.A.17 **West Clinker Belt** (designated as 419.BC4)

Unit Description: Clinker from the clinker cooler is transferred into the West clinker silo by conveyor belt. The discharge from the belt is controlled by a baghouse. No unit-specific applicable requirements.

II.A.18 **Clinker Silos** (designated as 511.SX1 thru 3)

Unit Description: Clinker from the clinker cooler is transferred to one of three storage silos. Each clinker storage silo is equipped with a baghouse to control emissions when loading. No unit-specific applicable requirements.

II.A.19 **Clinker Reclaim Hopper** (designated as 511.BF1)

Unit Description: Imported clinker is fed to the clinker tunnel conveyor belt by the outside clinker hopper. Emissions during transfer of clinker to the conveyor are controlled by a baghouse that discharges into the clinker tunnel. No unit-specific applicable requirements.

II.A.20 **East Clinker Silo Discharge** (designated as 511.BF2)

Unit Description: Produced clinker is fed to the clinker tunnel conveyor belt from the East clinker storage silo. Emissions during transfer of clinker to the conveyor are controlled by a baghouse that discharges into the clinker tunnel. No unit-specific applicable requirements.

II.A.21 **West Clinker Silo Discharge** (designated as 511.BF3)

Unit Description: Produced clinker is fed to the clinker tunnel conveyor belt from the West clinker storage silo. Emissions during transfer of clinker to the conveyor are controlled by a baghouse that discharges into the clinker tunnel. No unit-specific applicable requirements.

II.A.22 **Gypsum Silo Discharge** (designated as 511.BF4)

Unit Description: Gypsum is fed to the clinker tunnel conveyor belt from the gypsum storage silo. Emissions during transfer of gypsum to the conveyor are controlled by a baghouse that discharges into the clinker tunnel. No unit-specific applicable requirements.

II.A.23 **Clinker Tunnel Exitway** (designated as 511.BF1 thru 4)

Unit Description: The clinker reclaim hopper baghouse (511.BF1), east clinker silo baghouse (511.BF2), west clinker silo baghouse (511.BF3), and gypsum silo baghouse (511.BF4) all discharge in the clinker tunnel. Emissions are discharged through the tunnel exitway. No unit-specific applicable requirements.

II.A.24 **Gypsum Silo** (designated as 512.SX1)

Unit Description: Gypsum is stored in the gypsum storage silo. A baghouse is installed on the gypsum storage silo to control dust during loading. No unit-specific applicable requirements. No unit-specific applicable requirements.

II.A.25 **Finish Mill** (designated as 514.BF2)

Unit Description: The finish mill grinds clinker and gypsum to produce finished cement product. Dust generated during milling is captured by a baghouse equipped with a BLDS (bag leak detection system)

II.A.26 **Finish Mill Separator** (designated as 514.BF1)

Unit Description: After clinker and gypsum are ground into cement product, a separator returns the oversized cement particles to the finish mill. Dust generated by the finish mill separator is collected by a baghouse.

II.A.27 **Finish Cement Storage Silos** (designated as 611.BF1)

Unit Description: There are six storage and two interstice silos where the finished cement product is stored. A single common baghouse is located on top of the silos and is used to control emissions during loading and unloading operations. No unit-specific applicable requirements.

II.A.28 **North Cement Load Out** (designated as 611.BF2)

Unit Description: The cement loadout system located on the North side of the silos (rail load out side) is controlled by a baghouse during unloading from the silos for rail shipping. No unit-specific applicable requirements.

II.A.29 **South Cement Load Out** (designated as 611.BF3)

Unit Description: The cement loadout system located on the South side of the silos (truck load out side) is controlled by a baghouse during unloading from the silos for truck shipping. No unit-specific applicable requirements.

II.A.30 **Materials Handling Operation** (designated as MHO)

Unit Description: Includes the following emission units: 315.SX1 thru 4; 315.SX5; 316.BF1 thru 5; 316.BF6; 411.SX1 & 2; 412.BE1 & 2; 413.BF1; 419.BF8; 419.BC3; 419.BC4; 511.SX1 thru 3; 511.BF1 thru 4; 512.SX1; 611.BF1; 611.BF2; and 611.BF3.

II.B. **Requirements and limitations.**

The following emission limitations, standards, and operational limitations apply to the permitted facility as indicated: (R307-415-6a(1))

II.B.1 **Conditions on permitted source (Source-wide)**

II.B.1.a **Condition:**

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Authority granted under R307-401-5 and 40 CFR 60.11(d) and 40 CFR 63.6 (Subpart A); condition originated in DAQE-AN0303009-03]

II.B.1.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.a.2 **Recordkeeping:**

Permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.1.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.b **Condition:**

The permittee shall comply with the applicable requirements for recycling and emission reduction for class I and class II refrigerants pursuant to 40 CFR 82, Subpart F - Recycling and Emissions Reduction. [Authority granted under 40 CFR 82.150(b); condition originated in 40 CFR 82]

II.B.1.b.1 **Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart F.

II.B.1.b.2 **Recordkeeping:**

All records required in 40 CFR 82, Subpart F shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

II.B.1.b.3 **Reporting:**

All reports required in 40 CFR 82, Subpart F shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

II.B.1.c **Condition:**

The permittee shall comply with the applicable requirements for servicing of motor vehicle air conditioners pursuant to 40 CFR 82, Subpart B - Servicing of Motor Vehicle Air Conditioners. [Authority granted under 40 CFR 82.30(b); condition originated in 40 CFR 82]

II.B.1.c.1 **Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart B.

II.B.1.c.2 **Recordkeeping:**

All records required in 40 CFR 82, Subpart B shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

II.B.1.c.3 **Reporting:**

All reports required in 40 CFR 82, Subpart B shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

II.B.1.d **Condition:**

Visible emissions shall be no greater than 20 percent opacity unless otherwise specified in this permit. [Authority granted under R307-201-1(2); condition originated in R307-201-1(2) & DAQE-958-96]

II.B.1.d.1 **Monitoring:**

A visual opacity survey of each affected emission unit shall be performed on a weekly basis by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than steam are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9 for point sources, and in accordance with 58 FR 61640 Method 203C for fugitive emission sources.

II.B.1.d.2 **Recordkeeping:**

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is indicated, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9 or 58 FR 61640, Method 203C shall also be maintained in accordance with Provision I.S.1 of this permit.

II.B.1.d.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.e **Condition:**

All unpaved roads, other unpaved operational areas that are used by mobile equipment, and all disturbed surfaces not involved with operations shall be water sprayed and/or chemically treated to control fugitive dust. Treatment shall be of sufficient frequency and quantity to minimize fugitive dust as necessary to meet any applicable opacity limitations of this permit. The permittee is not required to apply water to surfaces during freezing conditions. If chemical treatment is to be used, the plan shall be pre-approved by the Executive Secretary. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0303009-03]

II.B.1.e.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.e.2 **Recordkeeping:**

Instances of water and/or chemical application to unpaved areas shall be recorded and maintained by the permittee. The ambient temperature shall be recorded any time water should be applied but can not be due to freezing conditions.

II.B.1.e.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.f **Condition:**

All paved roads and paved operational areas shall be swept and/or water sprayed to minimize fugitive dust. The sweeping and/or water spray shall be conducted as dry conditions warrant or as determined necessary by the Executive Secretary. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0303009-03]

II.B.1.f.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.f.2 **Recordkeeping:**

Instances of each sweeping event or water application to the paved areas shall be recorded and maintained by the permittee.

II.B.1.f.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.g **Condition:**

The permittee shall have a written operations and maintenance plan, approved by the Executive Secretary, for each affected source subject to the provisions of 40 CFR 63 (Subpart LLL). The written plan shall include provisions (1) through (4) as listed in 40 CFR 63.1350 (a). A portion of the plan shall address startup, shutdown, and malfunction requirements of 40 CFR 63.6(e)(3). [Authority granted under 40 CFR 63 (Subpart LLL) & (Subpart A); condition originated in 40 CFR 63 (Subpart LLL)]

II.B.1.g.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.g.2 **Recordkeeping:**

Permittee shall document activities performed to assure proper operation and maintenance as outlined in 40 CFR 63.1350 (a). Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.1.g.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.h **Condition:**

(i) The Permittee shall implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the affected emission unit during periods of startup, shutdown, and malfunction; a program of corrective action for malfunctioning processes; and air pollution control and monitoring equipment used to comply with the standards for the affected emission unit.

(ii) During periods of startup, shutdown, and malfunction, the Permittee shall operate and maintain the affected emission unit (including associated air pollution control and monitoring equipment) in accordance with the procedures specified in the startup, shutdown, and malfunction plan developed under paragraph (i) of this condition.

(iii) The Permittee shall maintain at the affected emission unit a current startup, shutdown, and malfunction plan and shall make the plan available upon request for inspection and copying by the Executive Secretary. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in paragraph (v) of this condition, the Permittee shall maintain at the affected emission unit each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and shall make each such previous version available for inspection and copying by the Executive Secretary for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected emission unit ceases operation or is otherwise no longer subject to the provisions of 40 CFR 63, the Permittee shall retain a copy of the most recent plan for 5 years from the date the affected emission unit ceases

operation or is no longer subject to 40 CFR 63 and shall make the plan available upon request for inspection and copying by the Executive Secretary.

(iv) To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the Permittee may use the affected emission unit's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection when requested by the Executive Secretary.

(v) The Permittee may periodically revise the startup, shutdown, and malfunction plan for the affected emission unit as necessary to satisfy the requirements of 40 CFR 63 or to reflect changes in equipment or procedures at the affected emission unit. However, each such revision to a startup, shutdown, and malfunction plan shall be reported in the semiannual report required by reporting. If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the Permittee developed the plan, the Permittee shall revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the affected emission unit during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the Permittee makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the affected emission unit which are deemed to be a startup, shutdown, malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under 40 CFR 63, the revised plan shall not take effect until after the Permittee has provided a written notice describing the revision to the permitting authority.

(vi) Any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by 40 CFR 63 shall not be deemed to constitute permit revisions under this permit. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected emission unit shall be deemed to fall within the permit shield provision in this permit. [Authority granted under 40 CFR 63 Subpart A; condition originated in 40 CFR 63 (Subpart LLL)]

II.B.1.h.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.h.2 **Recordkeeping:**

The owner or operator shall maintain files of all information (including all reports and notifications) required by this condition in a form suitable and readily available for expeditious inspection and review. These files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche.

II.B.1.h.3 **Reporting:**

In the event of a startup, shutdown or malfunction, the following reporting requirements shall be followed:

(1) Periodic startup, shutdown, and malfunction reports. If actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown and malfunction plan, the owner or operator shall state such information in a startup, shutdown, and malfunction report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period, and they must include the number, duration, and a brief description of each startup, shutdown, or malfunction. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, that shall be submitted to the Executive Secretary semiannually. The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each semiannual reporting period.

(2) Immediate startup, shutdown, and malfunction reports. Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the source's startup, shutdown, and malfunction plan, the owner or operator shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The 2-day report required shall consist of a telephone call or facsimile (FAX) transmission. The letter shall be delivered or postmarked within 7 working days after the end of the event and shall contain the name, title, and signature of the responsible official, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.

In addition to the above reporting requirements and any requirements in Section I of this permit, one summary report shall be submitted semiannually for the hazardous air pollutants monitored at each affected source. The summary report shall be entitled "Summary Report - Gaseous and Opacity Excess Emission and Continuous Monitoring System Performance" and shall contain the following information:

(A) The company name and address of the affected source;
(B) An identification of each hazardous air pollutant monitored at the affected source;
(C) The beginning and ending dates of the reporting period;
(D) A brief description of the process units;
(E) The emission and operating parameter limitations from 40 CFR 63 Subpart LLL;
(F) The monitoring equipment manufacturer(s) and model number(s);
(G) All exceedences of maximum control device inlet gas temperature limits;
(H) All failures to calibrate thermocouples and other temperature sensors as required,
(I) All failures to maintain the activated carbon injection rate, and the activated carbon injection carrier gas flow rate or pressure drop, as applicable;

(J) The results of any combustion system component inspections conducted within the reporting period;
(K) All failures to comply with any provision of the operation and maintenance plan;
(L) The date of the latest CMS certification or audit;
(M) The total operating time of the affected source during the reporting period;
(N) An emission data summary (or similar summary if the owner or operator monitors control system parameters), including the total duration of excess emissions during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes;
(O) A CMS performance summary (or similar summary if the owner or operator monitors control system parameters), including the total CMS downtime during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of CMS downtime expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total CMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, nonmonitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes;
(P) A description of any changes in CMS, processes, or controls since the last reporting period;
(Q) The name, title, and signature of the responsible official who is certifying the accuracy of the report; and
(R) The date of the report.

The owner or operator shall submit all reports to the Executive Secretary as well as a copy of each report to the EPA Regional office at:

EPA Region VIII
Director
Air and Toxics Division
999 18th St.
1 Denver Place, Suite 300
Denver, CO 80202-2405

The regional office may waive this requirement for any reports at its discretion.

II.B.2 **Conditions on Stationary Crusher (211.CR1)**

II.B.2.a **Condition:**

Visible emissions shall be no greater than 7 percent opacity from the baghouse. [Authority granted under 40 CFR 60.672(a)(2) (Subpart OOO); condition originated in DAQE-AN0303009-03]

II.B.2.a.1 **Monitoring:**

A visual observation of each affected emission unit shall be performed on a weekly basis by an individual trained on the observation procedures of 40 CFR

60, Appendix A, Method 9. The individual is not required to be a certified visible emissions observer (VEO). If any visible emissions are observed, an opacity determination of that emission unit shall be performed by a certified VEO in accordance with 40 CFR 60, Appendix A, Method 9 within 24 hours of the initial observation. For each affected emission unit, if no visible emissions are observed for eight consecutive weeks the observation frequency shall be reduced to a monthly basis. If visible emissions are observed during any monthly observation the frequency shall revert back to a weekly basis.

II.B.2.a.2 **Recordkeeping:**

Records of visual observations performed and data required by 40 CFR 60, Appendix A, Method 9 for each determination shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.2.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.b **Condition:**

Emissions of TSP shall be no greater than 0.05 g/dscm. [Authority granted under 40 CFR 60.672(a)(1) (Subpart OOO); condition originated in 40 CFR 60.672(a)(1) (Subpart OOO)]

II.B.2.b.1 **Monitoring:**

Stack testing shall be performed as specified below:

(a) Frequency. Emissions shall be tested every three years, based on the date of the most recent stack test. Tests may also be required at the direction of the Executive Secretary.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) approved access shall be provided to the test location.

(2) Sample Method - 40 CFR 60. Appendix A, Method 5 or Method 17 shall be used to determine the particulate matter concentration. The minimum sample volume shall be 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 deg. C (250 deg F), to prevent water condensation on the filter.

(d) Calculations. To determine mass emission rates (lb./hr., etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.2.b.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.2.b.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.c **Condition:**

Permittee shall operate water sprays or dust suppression sprays to control fugitive emissions. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary. Sprays shall not be required during periods of freezing temperatures.. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0303009-03]

II.B.2.c.1 **Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

II.B.2.c.2 **Recordkeeping:**

An operators log shall be maintained of all monitoring provisions listed above. Records of water spray system inspections shall be kept for all periods of operation and the ambient temperature shall be recorded any time water should be applied but can not be due to freezing conditions.

II.B.2.c.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.3 **Conditions on Raw Material Transfer (211.GA1)**

II.B.3.a **Condition:**

Visible emissions shall be no greater than 7 percent opacity. [Authority granted under 40 CFR 60.672(a)(1)(2) (Subpart OOO); condition originated in DAQE-AN0303009-03]

II.B.3.a.1 **Monitoring:**

A visual observation of each affected emission unit shall be performed on a weekly basis by an individual trained on the observation procedures of 40 CFR

60, Appendix A, Method 9. The individual is not required to be a certified visible emissions observer (VEO). If any visible emissions are observed, an opacity determination of that emission unit shall be performed by a certified VEO in accordance with 40 CFR 60, Appendix A, Method 9 within 24 hours of the initial observation. For each affected emission unit, if no visible emissions are observed for eight consecutive weeks the observation frequency shall be reduced to a monthly basis. If visible emissions are observed during any monthly observation the frequency shall revert back to a weekly basis.

II.B.3.a.2 **Recordkeeping:**

Records of visual observations performed and data required by 40 CFR 60, Appendix A, Method 9 for each determination shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.3.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.3.b **Condition:**

Permittee shall operate water sprays or dust suppression sprays to control fugitive emissions. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary. Sprays shall not be required during periods of freezing temperatures.. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0303009-03]

II.B.3.b.1 **Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

II.B.3.b.2 **Recordkeeping:**

An operators log shall be maintained of all monitoring provisions listed above. Records of water spray system inspections shall be kept for all periods of operation and the ambient temperature shall be recorded any time water should be applied but can not be due to freezing conditions.

II.B.3.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.4 **Conditions on Coal Grinding System (41B.ML1)**

II.B.4.a **Condition:**

Visible emissions shall be no greater than 20 percent opacity. [Authority granted under 40 CFR 60.252(c) (Subpart Y); condition originated in DAQE-AN0303009-03]

II.B.4.a.1 **Monitoring:**

A visual observation of each affected emission unit shall be performed on a weekly basis by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. The individual is not required to be a certified visible emissions observer (VEO). If any visible emissions are observed, an opacity determination of that emission unit shall be performed by a certified

VEO in accordance with 40 CFR 60, Appendix A, Method 9 within 24 hours of the initial observation. For each affected emission unit, if no visible emissions are observed for eight consecutive weeks the observation frequency shall be reduced to a monthly basis. If visible emissions are observed during any monthly observation the frequency shall revert back to a weekly basis.

II.B.4.a.2 **Recordkeeping:**

Records of visual observations performed and data required by 40 CFR 60, Appendix A, Method 9 for each determination shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.4.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.5 **Conditions on Coal Silo (41B.SX1)**

II.B.5.a **Condition:**

Visible emissions shall be no greater than 20 percent opacity. [Authority granted under 40 CFR 60.252(c) (Subpart Y); condition originated in DAQE-AN0303009-03]

II.B.5.a.1 **Monitoring:**

A visual observation of each affected emission unit shall be performed on a weekly basis by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. The individual is not required to be a certified visible emissions observer (VEO). If any visible emissions are observed, an opacity determination of that emission unit shall be performed by a certified VEO in accordance with 40 CFR 60, Appendix A, Method 9 within 24 hours of the initial observation. For each affected emission unit, if no visible emissions are observed for eight consecutive weeks the observation frequency shall be reduced to a monthly basis. If visible emissions are observed during any monthly observation the frequency shall revert back to a weekly basis.

II.B.5.a.2 **Recordkeeping:**

Records of visual observations performed and data required by 40 CFR 60, Appendix A, Method 9 for each determination shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.5.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.6 **Conditions on Kiln & Pre -Calciner and Raw Mill (317.BF1)**

II.B.6.a **Condition:**

Emissions of TSP shall be no greater than 0.3 lbs per ton of kiln feed. [Authority granted under R307-401-6(1) [BACT] & 40 CFR 60 (Subpart F) & 40 CFR 63 (Subpart LLL); condition originated in DAQE-AN0303009-03]

II.B.6.a.1 **Monitoring:**

Stack testing shall be performed as specified below:

(a) Testing and Frequency. Emissions shall be tested every three years, based on the date of the most recent stack test. Tests may also be required at the direction of the Executive Secretary.

(b) Notification. At least 60 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) and/or Mine Safety and Health Administration (MSHA)-approved access shall be provided to the test location.

(2) Sample Method - 40 CFR 60. Appendix A, Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The minimum sample time and sample volume shall be 60 minutes and 0.85 dscm (30.0 dscf). The emission rate of particulate matter shall be computed for each run using the equation in 40 CFR 63.1349 (b) (1).

(d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.6.a.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.6.a.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.6.b **Condition:**

Emissions of PM_{10} shall be no greater than 20.5 lbs/hr. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0303009-03]

II.B.6.b.1 **Monitoring:**

Stack testing shall be performed as specified below:

(a) Frequency. Emissions shall be tested every three years, based on the date of the most recent stack test. Tests may also be required at the direction of the Executive Secretary.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) and/or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

(2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.

(3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM_{10}.

(4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

(d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.6.b.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.6.b.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.6.c **Condition:**

Visible emissions shall be no greater than 20 percent opacity. [Authority granted under 40 CFR 63, Subpart LLL; condition originated in DAQE-AN0303009-03]

II.B.6.c.1 **Monitoring:**

The permittee shall calibrate, maintain and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere in accordance with R307-170 and 40 CFR 63.8 (Subpart A), and shall record the output of the system. The output shall be reviewed at least monthly for compliance with the opacity limit; compliance is to be based on the percent opacity averaged over six consecutive minutes.

II.B.6.c.2 **Recordkeeping:**

Results of opacity observations shall be recorded and maintained as required in R307-170 and as described in Provision I.S.1 of this permit.

II.B.6.c.3 **Reporting:**

Reports shall be submitted as outlined in R307-170 and Provision I.S.1 of this permit.

II.B.6.d **Condition:**

Emissions of NO_x shall be no greater than 2165 tons per rolling 12-month period. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0303009-03]

II.B.6.d.1 **Monitoring:**

While the affected emission unit is operating, hourly NO_x emission rates expressed in tons per hour shall be determined in accordance with R307-170 using the appropriate conversion factors. The applicable performance specification in R307-170 shall be 40 CFR 60, Appendix B, Performance Specification 6 - "Specifications and Test Procedures for Continuous Emission Rate Monitoring Systems in Stationary Sources". By the 25th day of each month a new 12-month NO_x emission total for the common stack shall be calculated as the sum of the monthly NO_x emission totals for each of the previous 12 months.

II.B.6.d.2 **Recordkeeping:**

The permittee shall keep the records specified in R307-170-8 and any additional records required by provision I.S.1 of this permit. These records shall be maintained in accordance with Provision I.S.1.

II.B.6.d.3 **Reporting:**

The permittee shall comply with the reporting provisions in R307-170-9 and any additional reporting provisions contained in Section I of this permit.

II.B.6.e **Condition:**

The permittee shall use only the following fuels in the rotary kiln: coal, tire derived fuel (TDF), natural gas, diesel fuel oil, or used oil.

The permittee shall use only the following fuels in the pre-calciner: coal, tire derived fuel (TDF), used oil, diesel fuel oil, or natural gas.

Additionally, the permittee shall be limited to a maximum TDF consumption not to exceed 15% of the combined energy input to the rotary kiln and pre-calciner on a monthly basis. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0303009-03]

II.B.6.e.1 **Monitoring:**

Within the first 25 days of each month, a 12-month total of fuel usage and the respective heating values shall be determined using records from the previous 12 months.

II.B.6.e.2 **Recordkeeping:**

The permittee shall record and maintain records of the types and quantity of each fuel combusted daily.

II.B.6.e.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.6.f **Condition:**

Consumption of used oil fuel TSP shall be no greater than 85724 gallons per rolling 12-month period. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0303009-03]

II.B.6.f.1 **Monitoring:**

Consumption shall be determined within the first 25 calendar days of each month, for the previous month, using purchase records and inventory information. The total shall then be added to the previous 11 months total for a 12 month rolling total. Any adjustments to the total shall be fully explained and justified.

II.B.6.f.2 **Recordkeeping:**

Records of used oil combusted shall be kept daily for all periods when the plant is in operation.

II.B.6.f.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.6.g **Condition:**

Permittee shall meet the following requirements when used oil or tire derived fuel (TDF) is burned in the rotary kiln:

Combustion gas temperature at the rotary kiln exit shall not drop below 1500 degrees Fahrenheit for more than five minutes in any 60-minute period.

Oxygen content at the kiln system ID fan shall not drop below 2% for more than five minutes in any 60-minute period. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0303009-03]

II.B.6.g.1 **Monitoring:**

The permittee shall continuously monitor the temperature and oxygen content at all times used oil or TDF is burned in the kiln using equipment approved by the Executive Secretary. Calibration procedure and frequency shall be according to manufacturers specifications. Use of factory calibrated thermocouples for temperature measurement is approved. All monitoring equipment for both temperature and oxygen shall be located such that an inspector can safely read the output at any time.

Additionally, the permittee shall monitor the quantities and times that used oil or TDF is burned in kiln.

II.B.6.g.2 **Recordkeeping:**

Permittee shall record the temperature and oxygen content at no less than every 5 minutes during operations when used oil or TDF is burned in the kiln. The permittee shall record the quantities and times when used oil or TDF is burned in the kiln.

II.B.6.g.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.6.h **Condition:**

The concentration of contaminants or parameters in any used oil fuel burned in the Kiln shall not exceed the following levels: Arsenic 5 ppm by weight, Barium 100 ppm by weight, Cadmium 2 ppm by weight, Chromium 10 ppm by weight, Lead 100 ppm by weight, Total Halogens 1,000 ppm by weight, Sulfur 0.5 percent by weight, and Flash Point not less than 100 degrees F. Used oil exceeding any of the above contaminants shall not be burned until the permittee has submitted and received approval of a modeling analysis of the projected emissions for each contaminant from the Executive Secretary. The modeling analysis shall show in each case that the resulting concentration of contaminant in the ambient air does not exceed the TLV/100 value at the fence line for the given contaminant. Any used oil fuel that contains more than 1,000 ppm by weight of total halogens shall be considered a hazardous waste and shall not be burned in the kiln. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0303009-03]

II.B.6.h.1 **Monitoring:**

The permittee shall maintain test certification data for each load of used oil fuel received. Certification shall be either by permittee testing or test reports provided by the used oil fuel vendor. The used oil fuel shall be tested for halogen content by ASTM Method D-808-81, EPA Method 8240 or Method 8260 before used oil fuel is transferred to a holding tank or burned.

II.B.6.h.2 **Recordkeeping:**

Records of used oil fuel consumption and the test reports shall be kept for all periods when the plant is in operation.

II.B.6.h.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.6.i **Condition:**

The permittee shall operate the kiln such that the temperature of the gas at the inlet to the kiln particulate matter control device (PMCD) and alkali bypass PMCD, if applicable, does not exceed the applicable temperature limits (for both raw mill operating and not operating) as determined and established in accordance with 40 CFR 63.1349 (b) (3) (iv). The permittee shall conduct an inspection of the components of the combustion system of each kiln or in-line kiln/raw mill at least once per year. [Authority granted under 40 CFR 63, Subpart LLL; condition originated in 40 CFR 63 (Subpart LLL)]

II.B.6.i.1 **Monitoring:**

(1) The permittee shall install, calibrate, maintain, and continuously operate a continuous monitor to record the temperature of the exhaust gases from the kiln, in-line kiln/raw mill and alkali bypass, if applicable, at the inlet to, or upstream of, PM control devices. The recorder response range shall include zero and 1.5 times either of the average temperatures established during the performance test. The reference method shall be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval.

(2) The permittee shall monitor and continuously record the temperature of the exhaust gases from the kiln, in-line kiln/raw mill and alkali bypass, if applicable, at the inlet to the PM control device.

(3) The three hour rolling average temperature shall be calculated as the average 180 successive one-minute average temperatures.

(4) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average is added to the previous 179 values to calculate the three-hour rolling average.

(5) When the operating status of the raw mill of the in-line kiln/raw mill is changed from off to on, or from on to off the calculation of the three-hour rolling average temperature must begin anew, without considering previous recordings.

(6) The calibration of all thermocouples and other temperature sensors shall be verified at least once every three months.

II.B.6.i.2 **Recordkeeping:**

The permittee shall comply with the recordkeeping requirements specified in 63.10 of the general provisions of 40 CFR 63, and those specified in Section I of this permit. Additionally, the permittee shall keep a log of the annual inspections of the components of the combustion system of each kiln or in-line kiln/raw mill.

II.B.6.i.3 **Reporting:**

The permittee shall comply with the reporting requirements specified in 63.10 of the general provisions of 40 CFR 63, Subpart A, provisions of 40 CFR 63.1354, and those specified in Section I of this permit.

II.B.6.j **Condition:**

Emissions of Dioxins/Furans (D/F) shall be no greater than 0.20 ng per dscm (8.7 x 10 ^-11 gr per dscf) (TEQ) corrected to seven percent oxygen or 0.40 ng per dscm (1.7 x 10 ^-10 gr per dscf) (TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 deg. C (400 deg. F) or less. [Authority granted under 40 CFR 63 (Subpart LLL); condition originated in 40 CFR 63 (Subpart LLL)]

II.B.6.j.1 **Monitoring:**

(a) Frequency. Emissions shall be tested every 30 months based on the date of the most recent stack test. The source may also be tested at any time if directed by the Executive Secretary.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

(2) 40 CFR 60, Appendix A, Method 23 shall be used to determine the pollutant emission rate.

(3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.

(4) Performance tests shall be conducted while the raw mill of the in-line kiln/raw mill is under normal operating conditions and while the raw mill of the in-line kiln/raw mill is not operating. If equipped with an alkali bypass simultaneous performance tests of the kiln or in-line kiln/raw mill exhaust and the alkali bypass shall be performed, however the alkali bypass test is not required when the raw mill of the in-line kiln/raw mill is not operating.

(5) Each performance test shall consist of three separate runs; each run shall be conducted under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with 40 CFR 63.7(e). The duration of each run shall be at least 3 hours, and the sample volume for each run shall be at least 2.5 dscm (90 dscf).

(6) The temperature at the inlet to the kiln or in-line kiln/raw mill PMCD, and where applicable, the temperature at the inlet to the alkali bypass PMCD, must be continuously recorded during the period of the Method 23 test, and the continuous temperature record(s) must be included in the performance test report.

(7) One-minute average temperatures shall be calculated for each minute of each run of the test.

(8) The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with 40 CFR 63.1344(b).

(9) If activated carbon injection is used for D/F control, the rate of activated carbon injection to the kiln or in-line kiln/raw mill exhaust, and where applicable, the rate of activated carbon injection to the alkali bypass exhaust, must be continuously recorded during the period of the Method 23 test, and the continuous injection rate record(s) must be included in the performance test report. In addition, the performance test report must include the brand and type of activated carbon used during the performance test and a continuous record of either the carrier gas flow rate or the carrier gas pressure drop for the duration of the test. The run average injection rate must be calculated for each run, and the average of the run average injection rates must be determined and included in the performance test report and will determine the applicable injection rate limit in accordance with §63.1344(c)(1).

(d) Calculations. The concentration shall be determined for each test run, and the arithmetic average of the concentrations measured for the three runs shall be calculated and used to determine compliance.

II.B.6.j.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.6.j.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.6.k **Condition:**

Sulfur content of fuel burned shall be no greater than 1.0 lbs sulfur/MM Btu for any mixture of coal nor 0.85 pounds sulfur per million gross Btu heat input for any oil except used oil or 0.5 percent by weight for any used oil. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0303009-03]

II.B.6.k.1 **Monitoring:**

Certification of fuels shall be either by permittees testing or test reports from the fuel marketer. Methods for determining sulfur content of coal and fuel oil shall be those methods of the American Society for Testing and Materials, UAC R307-203-1(4)

(a) For determining sulfur content in coal, ASTM Methods D3177-75 or D4239-85 are to be used.

(b) For determining sulfur content in oil, ASTM Methods D2880-71 or D4294-89 are to be used.
(c) For determining the gross calorific (or Btu) content of coal, ASTM Methods D2015-77 or D3286-85 are to be used.

II.B.6.k.2 **Recordkeeping:**

Compliance with the above limitation shall be demonstrated by maintaining fuel receipt records showing sulfur content of the delivered fuel or maintaining records of all sulfur content testing performed on the delivered fuel.

II.B.6.k.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.6.l **Condition:**

Emissions of CO shall be no greater than 13045 tons per rolling 12-month period and 6,600 pounds per hour. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0303009-03]

II.B.6.l.1 **Monitoring:**

While the affected emission unit is operating, hourly CO emission rates expressed in tons per hour shall be determined in accordance with R307-170 using the appropriate conversion factors. The applicable performance specification in R307-170 shall be 40 CFR 60, Appendix B, Performance Specification 6 - "Specifications and Test Procedures for Continuous Emission Rate Monitoring Systems in Stationary Sources". By the 25th day of each month a new 12-month CO emission total for the common stack shall be calculated as the sum of the monthly CO emission totals for each of the previous 12 months.

II.B.6.l.2 **Recordkeeping:**

The permittee shall keep the records specified in R307-170-8 and any additional records required by provision I.S.1 of this permit. These records shall be maintained in accordance with Provision I.S.1.

II.B.6.l.3 **Reporting:**

The permittee shall comply with the reporting provisions in R307-170-9 and any additional reporting provisions contained in Section I of this permit.

II.B.6.m **Condition:**

Production of clinker shall be no greater than 962265 tons per 12-month rolling period. [Authority granted under 40 CFR 60.63(a) (Subpart F) & DAQE-AN0303009-03; condition originated in 40 CFR 60 Subpart F and DAQE-AN0303009-03]

II.B.6.m.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.6.m.2 **Recordkeeping:**

Daily records of clinker production and kiln feed rates shall be kept for all periods of operation. By the 25th day of each month, a new 12-month total shall be calculated for clinker production using data from the previous 12 months. Records shall be kept in accordance with Provision I.S.1 of this permit

II.B.6.m.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.7 **Conditions on Raw Mill Recirculation (316.BF1 thru 5)**

II.B.7.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity from each baghouse. [Authority granted under 40 CFR 60.62(c) (Subpart F) & 40 CFR 63 (Subpart LLL); condition originated in DAQE-AN0303009-03]

II.B.7.a.1 **Monitoring:**

The permittee shall conduct a 1 minute visible emissions observations on a weekly basis using 40 CFR 60, Appendix A, Method 22 and while the mill is operating at highest load or capacity level. If visible emissions are observed, permittee will initiate corrective action within one hour and conduct a 30 minute opacity observation using 40 CFR 60, Appendix A, Method 9 within 24 hours of the initial observation.

II.B.7.a.2 **Recordkeeping:**

Results from opacity observations and all data required by 40 CFR 60, Appendix A, Method 22 shall be recorded and maintained in accordance with Provision I.S.1 of this permit.

II.B.7.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.8 **Conditions on Clinker Cooler (417.CC1)**

II.B.8.a **Condition:**

Emissions of TSP shall be no greater than 0.1 lbs particulate per ton of kiln feed. [Authority granted under R307-401-6(1) [BACT] & 40 CFR 60 (Subpart F) & 40 CFR 63 (Subpart LLL); condition originated in DAQE-AN0303009-03]

II.B.8.a.1 **Monitoring:**

Stack testing shall be performed as specified below:

(a) Frequency. Emissions shall be tested every three years, based on the date of the most recent stack test. Tests may also be required at the direction of the Executive Secretary.

(b) Notification. The source shall provide the above information at least 60 days before the test. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety

and Health Administration (OSHA) approved access shall be provided to the test location.

(2) Sample Method - 40 CFR 60. Appendix A, Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The minimum sample time and sample volume shall be 60 minutes and 1.15 dscm (40.6 dscf). The emission rate of particulate matter shall be computed for each run using the equation in 40 CFR 63.1349 (b) (1).

(d) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.8.a.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.8.a.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.8.b **Condition:**

Emissions of PM_{10} shall be no greater than 10.4 lbs/hr. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0303009-03]

II.B.8.b.1 **Monitoring:**

Stack testing shall be performed as specified below:

(a) Frequency. Emissions shall be tested every three years, based on the date of the most recent stack test. The source may also be tested at any time if directed by the Executive Secretary.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) approved access shall be provided to the test location.

(2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.

(3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM_{10}.

(4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

(d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.8.b.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.8.b.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.8.c **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under 40 CFR 60.63(b) (Subpart F) & 40 CFR 63 (Subpart LLL); condition originated in DAQE-AN0303009-03]

II.B.8.c.1 **Monitoring:**

The permittee shall calibrate, maintain and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere in accordance with R307-170 and 40 CFR 63.8 (Subpart A), and shall record the output of the system. The output shall be reviewed at least monthly for compliance with the opacity limit; compliance is to be based on the percent opacity averaged over six consecutive minutes.

II.B.8.c.2 **Recordkeeping:**

Results of opacity observations shall be recorded and maintained as required in R307-170 and as described in Provision I.S.1 of this permit.

II.B.8.c.3 **Reporting:**

Reports shall be submitted as outlined in R307-170 and Provision I.S.1 of this permit.

II.B.9 **Conditions on Finish Mill (514.BF2)**

II.B.9.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under 40 CFR 63, Subpart LLL; condition originated in DAQE-AN0303009-03]

II.B.9.a.1 **Monitoring:**

(1) The BLDS must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less. "Certify" shall mean that the instrument manufacturer has tested the instrument on gas streams having a range of particle size distributions and confirmed by means of valid filterable PM tests that the minimum detectable concentration limit is at or below 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The sensor on the BLDS must provide output of relative PM emissions.

(3) The BLDS must have an alarm that will activate automatically when it detects a significant increase in relative PM emissions greater than a preset level.

(4) The presence of an alarm condition should be clearly apparent to facility operating personnel.

(5) For a positive-pressure fabric filter, each compartment or cell must have a bag leak detector. For a negative-pressure or induced-air fabric filter, the bag leak detector must be installed downstream of the fabric filter. If multiple bag leak detectors are required (for either type of fabric filter), detectors may share the system instrumentation and alarm.

(6) All BLDS must be installed, operated, adjusted, and maintained so that they are based on the manufacturer's written specifications and recommendations.

(7) The baseline output of the system must be established as follows:
(i) Adjust the range and the averaging period of the device; and
(ii) Establish the alarm set points and the alarm delay time.

(8) After initial adjustment, the range, averaging period, alarm set points, or alarm delay time may not be adjusted except as specified in the operations and maintenance plan required by paragraph (a) of this section. In no event may the range be increased by more than 100 percent or decreased by more than 50 percent over a 1 calendar year period unless a responsible official as defined in R307-415-3 certifies in writing to the Executive Secretary that the fabric filter has been inspected and found to be in good operating condition.

(9) The permittee must maintain and operate the fabric filter such that the bag leak detector alarm is not activated and alarm condition does not exist for more than 5 percent of the total operating time in a 6-month block period. Each time the alarm activates, alarm time will be counted as the actual amount of time taken by the owner or operator to initiate corrective actions. If inspection of the fabric

filter demonstrates that no corrective actions are necessary, no alarm time will be counted.

II.B.9.a.2 **Recordkeeping:**

The following records shall be maintained in accordance with Provision I.S.1 of this permit:

(1) The permittee shall continuously record the output from the BLDS during periods of normal operation. Normal operation does not include periods when the BLDS is being maintained or during startup, shutdown or malfunction.

(2) Alarm times as defined in Monitoring shall be recorded.

II.B.9.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.10 **Conditions on Finish Mill Separator (514.BF1)**

II.B.10.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under 40 CFR 63, Subpart LLL; condition originated in DAQE-AN0303009-03]

II.B.10.a.1 **Monitoring:**

(1) The BLDS must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less. "Certify" shall mean that the instrument manufacturer has tested the instrument on gas streams having a range of particle size distributions and confirmed by means of valid filterable PM tests that the minimum detectable concentration limit is at or below 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The sensor on the BLDS must provide output of relative PM emissions.

(3) The BLDS must have an alarm that will activate automatically when it detects a significant increase in relative PM emissions greater than a preset level.

(4) The presence of an alarm condition should be clearly apparent to facility operating personnel.

(5) For a positive-pressure fabric filter, each compartment or cell must have a bag leak detector. For a negative-pressure or induced-air fabric filter, the bag leak detector must be installed downstream of the fabric filter. If multiple bag leak detectors are required (for either type of fabric filter), detectors may share the system instrumentation and alarm.

(6) All BLDS must be installed, operated, adjusted, and maintained so that they are based on the manufacturer's written specifications and recommendations.

(7) The baseline output of the system must be established as follows:
(i) Adjust the range and the averaging period of the device; and

(ii) Establish the alarm set points and the alarm delay time.

(8) After initial adjustment, the range, averaging period, alarm set points, or alarm delay time may not be adjusted except as specified in the operations and maintenance plan required by paragraph (a) of this section. In no event may the range be increased by more than 100 percent or decreased by more than 50 percent over a 1 calendar year period unless a responsible official as defined in R307-415-3 certifies in writing to the Executive Secretary that the fabric filter has been inspected and found to be in good operating condition.

(9) The permittee must maintain and operate the fabric filter such that the bag leak detector alarm is not activated and alarm condition does not exist for more than 5 percent of the total operating time in a 6-month block period. Each time the alarm activates, alarm time will be counted as the actual amount of time taken by the owner or operator to initiate corrective actions. If inspection of the fabric filter demonstrates that no corrective actions are necessary, no alarm time will be counted.

II.B.10.a.2 **Recordkeeping:**

The following records shall be maintained in accordance with Provision I.S.1 of this permit:

(1) The permittee shall continuously record the output from the BLDS during periods of normal operation. Normal operation does not include periods when the BLDS is being maintained or during startup, shutdown or malfunction.

(2) Alarm times as defined in Monitoring shall be recorded.

II.B.10.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.11 **Conditions on Materials Handling Operation (MHO)**

II.B.11.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity from each affected unit. [Authority granted under 40 CFR 63, Subpart LLL; condition originated in 40 CFR 63 (Subpart LLL)]

II.B.11.a.1 **Monitoring:**

(1) The permittee shall conduct a monthly 1-minute visible emissions test of each affected source in accordance with 40 CFR 60, Appendix A, Method 22. The test must be conducted while the affected source is in operation.

(2) If no visible emissions are observed in six consecutive monthly tests for any affected source, the permittee may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the permittee must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

(3) If no visible emissions are observed during the semi-annual test for any affected source, the permittee may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

(4) If visible emissions are observed during any Method 22 test, the permittee shall conduct a 6-minute test of opacity in accordance with 40 CFR 60, Appendix A, Method 9. The Method 9 test must begin within one hour of any observation of visible emissions.

(5) The requirement to conduct Method 22 visible emissions monitoring under this condition shall not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" shall mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

(6) If any partially enclosed or unenclosed conveying system transfer point is located in a building, the permittee shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of paragraphs 1 through 4 of this condition for each such conveying system transfer point located within the building, or for the building itself, according to paragraph 7 of this condition.

(7) If visible emissions from a building are monitored, the requirements of paragraphs 1 through 4 of this condition apply to the monitoring of the building, and the permittee shall also test visible emissions from each side, roof and vent of the building for at least 1 minute. The test must be conducted under normal operating conditions.

II.B.11.a.2 **Recordkeeping:**

Results from opacity observations and all data required by 40 CFR 60, Appendix A, Method 22 shall be recorded and maintained in accordance with Provision I.S.1 of this permit.

II.B.11.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.C. Emissions Trading.

(R307-415-6a(10))

Not applicable to this source.

II.D. Alternative Operating Scenarios.

(R307-415-6a(9))

Not applicable to this source.

Section III: PERMIT SHIELD

A permit shield was not granted for any specific requirements.

Section IV: ACID RAIN PROVISIONS.

This source is not subject to Title IV. This section is not applicable.

REVIEWER COMMENTS

This operating permit incorporates all applicable requirements contained in the following documents:

DAQE-AN0303009-03 dated July 22, 2003
